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10/568,298	02/14/2006	Janos Gerold Enderlein	071308.1024 (2004P05-445WO)	3514
31625 7590 05/19/2009 BAKER BOTTS L.L.P. PATENT DEPARTMENT 98 SAN JACINTO BLVD., SUITE 1500 AUSTIN, TX 78701-4039				
EXAMINER				
RIDEOUT, WILLIAM F				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/568,298

Applicant(s)

ENDERLEIN ET AL.

Examiner

Bill Rideout

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-31 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 21-31 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 14 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 02/14/2006
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 31-34 and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhao (US 2006/0063544).

Regarding claim 31, Zhao discloses a radio module for a cellular radio network (See Fig. 2 and paragraph [0022]), comprising:

a transceiver for sending and receiving messages (See paragraphs [0022]-[0023]);

a login device connected to the transceiver, wherein the login device produces a login message and transmits it via the transceiver when the radio module is turned on (See paragraph [0020]);

an auto reset trigger device which produces or receives an autoreset signal (See paragraph [0023] wherein an event, equivalent to an autoreset signal, is received by a connection manager, equivalent to an auto reset trigger device, which results in sending a connection request message, equivalent to triggering an autoreset); and

an autoreset unit connected to the autoreset trigger device for receiving the autoreset signal and disconnecting and subsequently reconnecting the radio module using the login device when said autoreset signal is received (See paragraph [0026] wherein a mobile device resets its

assigned network resources, thereby disconnecting, and paragraph [0023] wherein an Origination Message is sent to register on the network, equivalent to reconnection. Zhao also teaches of a connection manager that comprises the functionality of both the autoreset trigger device and the autoreset unit).

Regarding claim 32, Zhao further discloses the radio module of claim 31, wherein the autoreset trigger device transmits an autoreset signal when a logout message is received, and wherein the logout message comprises information that the login data for the radio module has been deleted from the radio network (See paragraph [0026] wherein a Release Order is received thereby logging off the mobile terminal and indicating that the radio module has been deleted from the radio network, and paragraph [0023] wherein the connection is reset by a connection manager).

Regarding claim 33, Zhao further discloses the radio module of claim 31, wherein the radio module comprises a first timer for detecting when a first time interval has elapsed which is connected to the autoreset trigger device, which can output an autoreset signal when the first time interval has elapsed (See paragraph [0023] wherein a first timer, a Service Check Timer detects when a first time interval has elapsed and a signal is sent to a connection manager, equivalent to an autoreset trigger device which sends a connection request when the first time interval has elapsed).

Regarding claim 34, Zhao further discloses the radio module of claim 31, wherein the radio module comprises a second timer that detects when a second time interval has elapsed which is connected to the autoreset unit, the latter being designed to turn the radio module on again only after a delay by the second time interval after it has been turned off in the event of the

autoreset (See paragraph [0023] wherein a second time interval is set by a back off timer and the connection manager initiates reactivation of the connection, and paragraph [0031] wherein the back off timer results in the mobile terminal being in a power saving mode for a period of time equivalent to turning off and on again).

Regarding claim 38, Zhao discloses the radio module of claim 33, further comprising:

a time reset unit connected to the transceiver and to the first timer, wherein the time reset unit resets the first timer whenever data in the radio module has been sent to or received from the radio network (See paragraph [0023] wherein the connection manager, equivalent to a time reset unit, resets the Service Check Timer upon receipt of data traffic and paragraph [0038] wherein the Service Check Timer is initialized by the connection manager as a result of establishing a connection which comprises sending data).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 21-25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhao in view of Virtanen (US 6,249,681).

Regarding claim 21, Zhao discloses a method for logging a radio module into a cellular radio network (See paragraph [0009] wherein a connection request is made and accepted, thereby logging into the cellular network), comprising:

receiving a login message from the radio module in the radio network (See paragraph [0009]); and

in response to an autoreset signal, an autoreset is automatically triggered (See paragraph [0026] wherein an event, equivalent to an autoreset signal, is received by a connection manager which results in sending a connection request message, equivalent to triggering an autoreset) in which the radio module deactivates and registers again in the radio network (See paragraph [0026] wherein a mobile device resets its assigned network resources, thereby disconnecting, and paragraph [0023] wherein an Origination Message is sent to register on the network). However, Zhao fails to disclose storing or deleting login data. Virtanen discloses a method of logging onto a cellular network wherein login data is stored (See Fig. 4, step 408 and column 9 lines 65-66) and deletes login data when the mobile station is logged out (See column 10 lines 55-58). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of Zhao comprising storing login data for the radio module in the radio network and deleting login data from the radio network when the radio module logs out, as disclosed by Virtanen, to increase efficiency of the invention by having login

information available when needed and then deleting it and freeing up network resources when not needed.

Regarding claim 22, Zhao further discloses the method of claim 21 above, wherein the autoreset signal is produced when the radio module is logged out of the radio network (See paragraph [0026] wherein a Release Order is sent thereby logging off the mobile terminal, and paragraph [0023] wherein the connection is reset as a result of the release order).

Regarding claim 23, Zhao further discloses the method of claim 21 above, wherein the autoreset signal is produced in the radio module as soon as a first interval has elapsed (See paragraph [0023] wherein a connection request is sent after a first time interval set by a Service Check Timer).

Regarding claim 24, Zhao further discloses the method of claim 23 above, wherein a second time interval is set for the radio module between turning off and turning on again in the event of the autoreset (See paragraph [0023] wherein a second time interval is set by a back off timer, and paragraph [0031] wherein the back off timer results in the mobile terminal being in a power saving mode for a period of time equivalent to turning off and on again).

Regarding claim 25, Zhao further discloses the method of claim 23, wherein the radio module turns on again immediately after turning off in the event of the autoreset (See paragraph [0023]).

Regarding claim 28, Zhao further discloses the method of claim 23 above, wherein the first time interval is restarted when the radio module sends data to the radio network or receives data from the radio network (See paragraph [0023] wherein the Service Check Timer is reset

upon receipt of data traffic and paragraph [0032] wherein the Service Check Timer is initialized as a result of establishing a connection which comprises sending data).

6. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhao in view of Virtanen and further in view of Valentine et al. (US 6,356,755).

Regarding claim 26, Zhao in view of Virtanen fails to disclose setting a timer by radio command as applied to claim 24 above. Valentine discloses setting a back off timer in a mobile station by a radio signal from a Mobile Switching Center (See column 7 lines 33-44). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of Zhao in view of Virtanen, wherein the first or second time interval can be set by radio command, as disclosed by Valentine, in order to enhance operation of the invention by remotely controlling reset parameters of the radio module.

Regarding claim 27, Zhao in view of Virtanen fails to disclose determining timer values according to mobile station parameters as applied to claim 26 above. Valentine discloses determining timer values according to mobile station parameters (See column 7 lines 33-44). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of Zhao in view of Virtanen, wherein maximum login time, after which the radio network logs out the radio module, or activity intervals are determined in which the radio module is supposed to be active, and these are adaptively used to determine the first or second time interval, as disclosed by Valentine, in order to enhance operation of the invention by setting reset parameters according to the requirements of the radio module.

7. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zhao in view of Virtanen and further in view of Doiron et al. (US 5,481,610). Zhao in view of Virtanen fails to disclose storing data in non volatile memory as applied to claim 21 above. Doiron discloses a mobile radio wherein parameters are stored and retrieved from a non volatile memory (See column 8 lines 4-16). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of Zhao in view of Virtanen, wherein data from volatile memory areas of the radio module is stored in nonvolatile form or outside the radio module before the autoreset for the radio module, and is written back to the volatile memory areas after it is turned on, as disclosed by Doiron, in order to enhance capability of the invention by storing parameters when the radio module is turned off.

8. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zhao in view of Virtanen and further in view of Katz et al. (US 2003/0061503). Zhao further discloses operation in a GPRS network as applied to claim 21 above (See paragraph [0009]). However, Zhao in view of Virtanen fails to disclose GSM, UMTS, EDGE or WLAN networks. Katz discloses a method for logging into a cellular network in GSM (See paragraph [0009]), UMTS (See paragraph [0014]), EDGE (See paragraph [0013]) and WLAN (See paragraph [0077]) networks. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of Zhao in view of Virtanen, wherein the radio network is one of a GSM network, a GPRS network, a UMTS network, an EDGE network and WLAN, as disclosed by Katz, to enhance operation of the invention by providing for implementation utilizing various network technologies.

9. Claims 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhao in view of Valentine.

Regarding claim 35, Zhao fails to disclose a timer memory as applied to claim 34 above. Valentine discloses a mobile station that receives and stores timer intervals (See column 7 lines 33-44). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the radio module of Zhao, wherein the first or the second timer comprises an input and a time interval memory and stores a time interval which has been input using the input unit to define the first or second time interval, as disclosed by Valentine, in order to enhance operation of the invention by providing flexibility in setting timers that control reconnection.

Regarding claim 36, Zhao fails to disclose setting a timer by radio command as applied to claim 35 above. Valentine discloses setting a back off timer in a mobile station by a radio signal from a Mobile Switching Center (See column 7 lines 33-44). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify radio module of Zhao, wherein the input unit is connected to the transceiver and defines the first or second time interval, as disclosed by Valentine, in order to enhance operation of the invention by remotely controlling reset parameters of the radio module.

10. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zhao in view of Doiron. Zhao further discloses a connection manager, equivalent to an evaluation unit, that defines time intervals for the Service Check Timer and the Back Off Timer, equivalent to defining first and second time intervals by accessing an activity memory and maximum login time as applied to claim 36 above (See paragraphs [0023] and [0037]). However, Zhao fails to

disclose storing timer data and other parameters in a memory. Doiron discloses a mobile radio wherein parameters are stored and retrieved from a memory (See column 8 lines 4-16).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the radio module of Zhao, wherein the radio module further comprises an activity memory that holds activity times for the radio module and a maximum login time memory that holds a maximum possible login time for the radio module in the radio network, as disclosed by Doiron, in order to enhance capability of the invention by storing parameters in a memory to facilitate coordination of reset functionality.

11. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zhao in view of Doiron. Zhao fails to disclose storing data in non volatile memory as applied to claim 31 above. Doiron discloses a mobile radio wherein parameters are stored and retrieved from a non volatile memory (See column 8 lines 4-16). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the radio module of Zhao, comprising a nonvolatile buffer store for buffering data during autoreset even when the power supply for the rest of the radio module is interrupted, as disclosed by Doiron, in order to enhance capability of the invention by storing parameters when the radio module is turned off or the power supply is interrupted.

12. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zhao in view of Katz. Zhao further discloses operation in a GPRS network as applied to claim 31 above (See paragraph [0009]). However, Zhao fails to disclose GSM, UMTS, EDGE or WLAN networks. Katz discloses a radio module that logs into a cellular network in GSM (See paragraph [0009]), UMTS (See paragraph [0014]), EDGE (See paragraph [0013]) and WLAN (See paragraph

[0077]) networks. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the radio module of Zhao, wherein the radio network is one of a GSM network, a GPRS network, a UMTS network, an EDGE network and WLAN, as disclosed by Katz, to enhance operation of the invention by providing for implementation utilizing various network technologies.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

Lee US 2004/0157606 discloses automatic call connection for a mobile terminal when a call is dropped.

Hass US 5,566,225 discloses a wireless data communications system that detects a disabled condition.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bill Rideout whose telephone number is 571-270-5762. The examiner can normally be reached on M-F 7:30 - 5:00 EST Alt Fri.

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William Rideout/

/Charles N. Appiah/
Supervisory Patent Examiner, Art Unit 2617